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ZANZIBAR PROTECTORATE.

ANNUAL REPORT
ON THE
AGRICULTURAL DEPARTMENT
FOR THE YEAR

1923

BY

R. ARMSTRONG,
Assistant Director.



ZANZIBAR

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1924.

ZANZIBAR PROTECTORATE.

REPORT ON THE AGRICULTURAL DEPARTMENT FOR THE YEAR 1923.

SECTION I.—GENERAL.

Mr. F. C. McClellan, C.B.E., who had been the Director of Agriculture since November, 1912, retired in August.

Mr. C. A. O'Connor left the Department in January, having been transferred to the Department of Agriculture in Mauritius.

Mr. G. Tomson, the Inspector of Plantations, went on leave in November.

Miss Welsford, the Mycologist, also went away on leave in October.

The Assistant Director of Agriculture returned from leave in October.

On the departure of Mr. C. A. O'Connor, Mr. Waterland was given charge of the Department in Pemba.

Mr. B. C. Johnstone was acting Director of Agriculture from the 18th August to the 29th November. The Assistant Director of Agriculture was appointed Acting Director on the 30th November.

SECTION II.—CLOVE HARVEST.

The Clove harvest of 1923-24 has been one of the smallest on record, but, such few cloves as there were, were all picked and, the weather being favourable, a very good sample of cloves has been produced. Prices have remained high, with the result that the greater portion of the cloves which were kept over by merchants from the very heavy crop of the previous season have been marketed. There has also been a very good market for stems. In a season such as the one we have just experienced, it is not easy to discover what the crop amounted to, as merchants held up cloves from the previous season when prices were not so good. It is usual to mix with these old cloves a certain amount of new cloves so as to improve the general appearance of the sample. Prices paid for picking have been fairly high. Owing to the fact that when there are not so many cloves on the trees the pickers have much more difficulty in obtaining a quantity of cloves which they consider will sufficiently remunerate them for their day's work. It was not found necessary to make any loans to plantation owners, but the clove duty rebate which was being paid to plantation owners just at the beginning of the harvest was probably found useful in

enabling them to have the ready cash wherewith to pay the pickers. Table VI shows the total clove crop in the two islands for the last 19 years. In this table the actual seasons are given in order to prevent as far as possible the overlapping of one crop by another.

SECTION III.—REGENERATION OF CLOVE AREAS.

Quite a large number of young clove trees have been planted under the scheme of Government bonuses. During the year a total of 45,000 young clove trees were supplied free to plantation owners in the island of Zanzibar. In Pemba about 2,700 were supplied from the nurseries at Fufuni and Tundaua. Although a good many young trees have been planted in the Weti district, it is rather remarkable that plantation owners have not applied for any from the large nursery at Makondeni.

The first batch of young clove trees planted under the bonus scheme became eligible for the first instalment and a large number of shambas had to be inspected. The work of inspection and marking is very arduous and occupies a considerable amount of time. In Zanzibar 24,290 young trees were passed by the Inspectors of the Department and sealed, and the owners thereof have received one rupee for each of these trees. In Pemba, owing to shortage of staff, it was not feasible to put the work of inspection into operation until November and, in consequence, there are still a large number of young trees which it has been impossible to deal with as yet. The work of inspection was commenced in the Weti district and up to the end of the year 1,014 young trees were passed and sealed, and the owners paid a bonus of one rupee each. In addition to the young trees supplied by the Government, plantation owners have provided themselves with a fair number.

At present the scheme seems to be more popular in Zanzibar than in Pemba. But this may be on account of its being better known and understood in this island. In any case, it is a distinct advantage, as there are more people available to pick cloves and transport facilities are better.

SECTION IV.—CLOVE BONUS REBATE TO PLANTATION OWNERS.

This scheme was brought into operation during 1922, and the first distribution did not prove very popular. A considerable number of plantation owners refused to apply for the money which was due to them. Now that they have become familiar with the scheme, it has become quite popular with the plantation owners. Not only were they all quite willing to accept the rebate in 1923, but a petition was sent to the Resident on behalf of those who had not received payment for 1922 requesting permission to apply for the money. The permission was granted and practically all plantation owners have now taken the bonus rebate on bearing trees for both 1922 and 1923.

The amount of money paid out was for Zanzibar Rs. 1,99,256 and for Pemba Rs. 3,43,807.50, a total of Rs. 5,43,063.50. The rate of payment was increased from Rs. 10 per hundred trees in 1922 to Rs. 15 per 100 trees, so that the total amount paid out in 1923 represents 3,620,420 bearing trees for the two islands. In co-operation with the Acting Treasurer and the Auditor, a new scheme has been arranged for the taking of these Agricultural Returns in 1924 by which it is hoped to minimize very much the possibility of giving wrong returns and of misrepresentation in cases of alleged agents and those duly authorised to receive payments on behalf of women. The scheme is so devised that it should form at least the basis of a reliable security in the ownership of trees upon which money could be advanced by an Agricultural Bank. In this country it is the trees wherein lies the value and not the land itself, except in and around the town of Zanzibar and a few other places where the land has a special value for building sites.

SECTION V.—GOVERNMENT PLANTATIONS.

Like all other plantations, the Government plantations have had an excellent year owing to the heavy clove crop of 1922-23, and the revenue for the year, as will be seen from Table XIX, has considerably exceeded anything previously obtained. This is the more interesting because, as will also be seen from the table quoted, the total expenditure has twice exceeded that in current year. During the latter part of the harvest, and particularly in Pemba, very heavy rains were experienced and large quantities of cloves were completely spoiled. Fufuni is the only shamba in Pemba which is provided with a proper cement drying floor. Most of the other plantations are so small that they will not pay to construct concrete drying floors. At three of the Government plantations in the Weti district it was impossible, owing to the weather conditions, to do anything at all with the stems, as by the time the rains had ceased these were completely rotten. It will be seen from the meteorological tables that the rainfall in the Weti district was the heaviest on record. The revenue from coconuts was very satisfactory and there were no defaulters.

The rate of wages has remained the same throughout the year, and there has been a steady supply of Wanyamwezi from the mainland. As the clove crop was very small and prices good, there was no difficulty about getting pickers.

R. ARMSTRONG,

Acting Director of Agriculture.

Zanzibar, 20th May, 1924.

TABLE I.

Expenditure and Revenue, 1923 :—

EXPENDITURE.				REVENUE.	
Administration.		Plantatio s.			
	Rs.		Rs.		Rs.
Staff	64,953	Staff	65,839	Sale of cloves	5,01,149
Travelling and Incidentals	7,911	Travelling and Incidentals	4,13	Sale of coconuts	1,45,604
General Clove Harvest	16,546	Clove Harvest	64,628	Ground rents	4,679
Sundry other charges	8,500	Cultivation	1,60,919	Sundry	8,963
Clove Regeneration	24,524	Curative Measures	6,532		
Bonus to Clove Growers	5,55,374	Sundry	16,716		
Bonus for planting young trees	26,103				
Other Special Expenditure	1,302				
Total Rs. 7,05,213		Total Rs. 3,18,766		Total Rs. 6,60,395	

TABLE II.

Course of harvest and deliveries compared with former years :—

Month.	1919.			1920.		
	Zanzibar fras.	Pemba fras.	Total fras.	Zanzibar fras.	Pemba fras.	Total fras.
January	39,628	75,663	115,291	24,340	18,319	42,659
February	33,230	76,330	109,560	11,050	9,468	20,518
March	20,714	40,540	61,254	4,353	8,208	12,561
April	11,007	34,596	45,603	3,874	6,895	10,769
May	16,249	26,878	43,127	2,042	3,868	5,910
June	5,741	16,289	22,030	644	1,055	1,699
July	5,170	13,405	18,575	982	9,592	10,574
August	8,964	19,763	28,727	4,598	1,573	6,171
September	4,177	26,221	30,398	8,898	4,504	13,402
October	8,833	30,565	39,398	6,461	9,734	16,195
November	7,483	21,042	28,525	17,995	26,144	44,139
December	12,917	9,834	22,751	16,972	25,112	42,084
Total	174,113	391,126	565,239	102,209	124,472	226,681

Month.	1921.			1922.		
	Zanzibar fras.	Pemba fras.	Total fras.	Zanzibar fras.	Pemba fras.	Total fras.
January	47,061	70,184	117,245	9,948	12,337	22,285
February	62,006	83,037	145,043	3,288	11,252	14,540
March	29,382	26,590	55,972	1,093	6,417	7,510
April	22,493	22,851	45,344	1,021	9,792	10,813
May	8,098	19,510	27,608	837	7,107	7,944
June	6,885	17,615	24,500	539	8,716	9,255
July	15,023	10,554	25,577	911	59	970
August	7,557	20,365	27,922	9,943	1,520	11,463
September	4,721	30,653	35,374	17,631	23,669	41,300
October	7,465	35,950	43,415	30,282	92,075	122,357
November	8,056	21,392	29,448	28,336	118,234	146,570
December	6,271	26,447	32,718	29,579	141,675	171,254
Total	225,018	385,148	610,166	133,408	432,853	566,261

TABLE II.—(continued).

Course of harvest and deliveries compared with former years :—

Month.	1923.		Total fras.
	Zanzibar fras.	Pemba fras.	
January	65,298	107,218	172,516
February	47,409	67,056	114,465
March	31,827	34,245	66,072
April	14,400	27,327	41,727
May	4,875	30,371	35,246
June	9,716	31,334	41,050
July	7,636	26,840	34,476
August	4,100	17,968	22,068
September	7,764	31,980	39,744
October	6,166	39,745	45,911
November	4,929	43,652	48,581
December	2,447	19,228	21,675
Total	206,567	476,964	683,531

TABLE III.

Protectorate clove crops for the past 19 seasons :—

Season.	Zanzibar	Pemba	Total
	Fras.	Fras.	Fras.
1904/05	81,303	584,208	665,511
1905/06	178,435	129,735	308,170
1906/07	63,004	203,496	266,500
1907/08	213,662	541,993	755,655
1908/09	165,727	449,691	615,418
1909/10	109,678	300,047	409,725
1910/11	45,194	139,307	184,501
1911/12	216,507	582,153	798,660
1912/13	31,018	104,368	135,386
1913/14	145,586	638,094	783,680
1914/15	194,920	331,389	526,309
1915/16	141,641	655,116	796,757
1916/17	208,716	302,919	511,635
1917/18	63,958	234,239	298,197
1918/19	259,273	565,229	824,502
1919/20	93,847	168,703	262,550
1920/21	231,831	316,446	548,277
1921/22	65,819	200,983	266,802
1922/23	291,417	690,498	981,915
Average 19 Seasons	147,449	375,717	523,166

Note.—Season—1st July to 30th June.

One frasila equals 35 lbs.

TABLE IV.
Annual Clove Exports, Pemba.

Year.	WETI DISTRICT.					CHAKE-CHAKE DISTRICT.				MKOANI DISTRICT.				Total Pemba.	
	Weti.	Mtambwe.	Junguni.	Kipangani. (Matanga Twan)	Msuk	District Total.	Chake.	Kiswani.	District Total.	Janban- game.	Mkoani.	Fufuni.	Kengeja.		District Total.
	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	Fs.	
1914	88,433	13,786	5,721	8,666	6,594	1,23,200	85,779	23,550	1,09,329	45,043	13,988	10,947	21,826	91,804	3,24,333
1915	1,64,655	25,072	12,992	21,738	11,126	2,35,583	1,46,913	46,330	1,93,243	79,069	26,732	40,228	46,693	1,92,722	6,21,548
1916	1,17,387	26,709	12,168	7,305	5,950	1,69,519	84,807	28,707	1,13,514	62,531	14,788	22,144	42,279	1,42,142	4,25,175
1917	20,951	12,135	5,248	7,828	4,449	50,611	23,096	8,011	31,107	23,114	4,654	12,010	10,850	50,628	1,32,346
1918	76,309	17,786	15,555	10,503	5,429	1,25,582	1,25,634	16,032	1,41,666	74,253	28,153	10,583	27,815	1,50,804	4,18,052
1919	1,40,562	18,810	10,269	7,427	5,763	1,82,831	77,261	28,463	1,05,724	51,370	16,964	13,876	26,807	1,09,017	3,97,572
1920	31,674	3,304	1,010	1,001	4,874	41,863	30,311	5,499	35,810	16,433	2,096	6,923	11,823	37,275	1,14,948
1921	1,04,339	12,302	10,650	7,714	9,663	1,44,668	93,601	20,740	1,14,341	12,484	55,703	26,131	44,756	1,39,074	3,98,083
1922	1,18,000	17,700	3,400	7,501	6,700	1,53,300	1,07,000	37,500	1,44,500	76,500	16,200	51,100	45,400	1,89,200	4,87,000
1923	1,33,688	29,244	18,814	12,308	4,897	1,98,951	1,19,289	34,196	1,53,485	53,079	15,490	27,149	49,595	1,45,313	4,97,749
Average 10 Years	99,600	17,685	9,583	9,199	6,544	1,42,611	89,369	24,903	1,14,272	49,427	19,477	22,109	33,784	1,24,797	3,81,680

NOTE.—This table shows the various places from which cloves, etc., are shipped in Pemba and is connected with the question of road provision; and facilities for getting produce to Zanzibar in better condition than is possible under the present system of carriage by canoes and dhows.

TABLE V.

Comparative prices of cloves and stems in London and in Zanzibar (pence per lb.) 1923:—

Month.	London.					Zanzibar.		
	Penang.	Amboyna.	Madagascar.	Zanzibar.	Stems.	Zanzibar.	Pemba.	Stems.
January	33·00	21·00	14·00	9·50	4·00	8·25	8·00	2·00
February	33·00	21·00	12·00	11·75	4·00	7·86	8·31	2·34
March	33·00	21·00	12·00	12·00	4·00	8·30	9·34	2·28
April	33·00	21·00	15·00	12·00	4·00	7·60	9·12	2·03
May	33·00	21·00	14·50	12·00	4·00	7·37	8·83	1·89
June	33·00	21·00	14·50	12·00	4·00	8·54	9·77	2·20
July	33·00	18·00	14·00	13·50	4·00	10·80	11·17	2·64
August	33·00	16·50	14·00	14·50	4·00	10·96	11·31	2·37
September	33·00	16·50	14·50	14·00	4·00	11·03	10·66	2·46
October	33·00	16·50	16·00	15·50	4·00	12·64	11·94	2·83
November	33·00	16·50	16·00	16·25	4·00	13·03	12·57	3·25
December	33·00	16·50	16·00	16·75	4·00	13·23	12·69	3·34

TABLE VI.

Proportions between the seasonal yields of cloves and stems for whole Protectorate :—

Season.	Cloves Fras.	Stems Fras.	Percentage of stems to cloves.
1904/1905	635,568	124,242	19½
1905/1906	308,950	78,248	25
1906/1907	266,512	48,307	18
1907/1908	755,634	153,562	20
1908/1909	614,630	121,156	19½
1909/1910	409,925	84,547	25
1910/1911	192,407	38,320	20
1911/1912	798,663	161,187	20
1912/1913	135,391	28,389	21
1913/1914	733,680	145,932	18½
1914/1915	526,309	64,179	12
1915/1916	796,757	89,630	11½
1916/1917	511,635	69,153	13½
1917/1918	298,197	42,951	14½
1918/1919	824,502	12,366	1½
1919/1920	262/551	107,405	41
1920/1921	548/277	64,210	11½
1921/1922	266,801	87,680	33
1922/1923	981,914	157,843	16

In a large crop year, or when the cloves have to be harvested in times of rain, the percentage of stems to cloves is less, as the energies of the owner have to be directed towards getting in the more valuable portion of his crop.

TABLE VII.

Export of cloves to different Continents from 1910 to 1923 in traslas of 35 lbs. each :—

Continent	1910	1911	1912	1913	1914	1915	1916
Europe	137,168	224,124	173,356	251,133	163,074	264,857	239,608
America	31,329	100,311	73,615	56,443	99,998	128,409	62,429
Asia	194,521	2,487,491	186,852	193,501	218,793	329,295	272,340
Africa	3,658	5,712	1,947	7,858	3,004	3,881	5,132
Australia	..	..	..	..	..	..	..
Total	366,676	2,817,638	435,770	508,935	484,869	726,442	579,509

Continent	1917	1918	1919	1920	1921	1922	1923
Europe	102,904	27,729	172,927	93,698	193,738	185,629	308,890
America	51,946	45,834	42,699	29,225	104,208	120,256	102,938
Asia	298,284	241,979	359,595	124,502	230,355	273,014	224,819
Africa	35,609	160,042	39,982	4,321	4,550	12,662	4,210
Australia	..	..	..	..	2,496	5,635	1,210
Total	488,743	475,584	615,203	251,746	535,347	597,196	642,067

Figures for previous years are given in my 1910 Annual Report.

TABLE VIII.

Average prices of cloves during 1923, month by month, in rupees compared with the five previous years:—

Month.	1918.			1919.		
	Zanzibar.	Pemba.	Stems.	Zanzibar.	Pemba.	Stems.
January	20.00	19.99	0.81	13.75	12.03	...
February	20.53	19.61	0.87	10.84	10.26	...
March	20.18	21.90	0.84	10.69	10.49	0.87
April	26.43	25.75	1.16	...	10.64	0.56
May	26.35	25.51	1.18	14.71	13.06	0.68
June	28.50	23.81	0.69	17.81	16.62	...
July	...	19.09	0.75	...	20.91	0.75
August	18.50	23.81	0.62	24.08	22.40	1.71
September	22.92	20.11	0.54	23.00	21.79	1.84
October	18.74	17.73	0.54	26.93	24.55	2.51
November	15.61	14.68	...	32.72	30.42	3.70
December	...	13.20	...	33.15	31.45	3.75
Yearly Average	21.77	20.43	0.80	20.76	18.72	1.82

Month.	1920.			1921.		
	Zanzibar.	Pemba.	Stems.	Zanzibar.	Pemba.	Stems.
January	29.79	28.14	3.38	...	11.37	1.44
February	30.50	29.03	3.94	...	12.85	1.43
March	29.00	28.25	2.84	15.11	13.95	1.95
April	30.19	28.96	2.88	15.86	14.84	2.32
May	...	29.39	2.70	16.02	14.58	3.08
June	...	28.62	2.25	16.29	14.91	3.41
July	22.00	22.03	2.10	22.91	21.00	4.52
August	...	19.50	2.31	26.02	21.03	5.94
September	...	21.09	2.37	26.06	24.19	5.46
October	24.87	20.97	2.19	27.30	25.12	6.25
November	14.87	14.25	1.69	30.80	28.02	6.79
December	14.50	12.06	1.62	31.37	28.67	6.49
Yearly Average	24.46	23.52	2.52	22.77	19.46	4.17

Month.	1922.			1923.		
	Zanzibar.	Pemba.	Stems.	Zanzibar.	Pemba.	Stems.
January	29.67	29.65	7.81	18.04	17.34	4.38
February	27.65	27.42	7.17	17.19	18.19	5.14
March	25.23	23.62	6.71	18.15	20.47	5.01
April	25.38	24.90	6.34	16.65	19.94	4.44
May	27.54	26.12	6.56	16.12	19.31	4.16
June	26.10	22.67	6.50	18.70	21.42	4.85
July	24.07	20.97	6.25	23.62	24.40	5.78
August	23.92	21.84	5.89	23.97	24.75	5.19
September	20.56	19.05	3.81	24.12	23.33	5.36
October	16.72	15.00	3.92	27.64	26.11	6.19
November	13.91	12.30	2.95	28.49	27.50	7.14
December	13.69	13.31	2.98	28.94	27.75	7.29
Yearly Average	22.87	21.40	5.57	21.76	22.54	5.41

TABLE IX.

Highest and lowest price of cloves and stems, 1923.

	Zanzibar cloves.		Pemba cloves.		Stems.	
	Month	Price Rs.	Month	Price Rs.	Month	Price Rs.
Maximum	November	31.56	November	30.00	November	7.50
Minimum	April	10.00	January	13.00	January	3.56

TABLE X.

Export of copra and palm kernels (produced in the Protectorate) for the past 10 years, and average price of copra per frasla of 35 lbs.

Year.	lbs.	Average price per frasla of 35 lbs.
		Rs. cts.
1914	18,983,017	3 87
1915	19,231,521	3 73
1916	12,258,341	4 72
1917	14,746,075	7 10
1918	7,126,578	3 71
1919	31,756,528	5 31
1920	18,850,826	6 59
1921	26,529,664	6 60
1922	16,445,744	5 33
1923	21,638,864	4 82

Copra and palm kernels were formerly included as one in the Customs Returns, but are now kept separate.

The export of palm kernels is a negligible quantity, and the figure since 1922 is for copra only.

TABLE XI.

Monthly average price of copra per frasla of 35 lbs. 1923.

Month	Per frasla	Equivalent to £ per ton		
	Rs. Cts.	£	s.	d.
January	4 44	18	18	10
February	4 64	19	15	11
March	5 03	21	9	2
April	5 28	22	10	6
May	5 15	21	19	5
June	4 79	20	8	9
July	4 68	19	19	4
August	4 58	19	10	10
September	4 87	20	15	7
October	4 84	20	13	0
November	4 76	20	6	2
December	4 83	20	12	2
Yearly average	4 82	20	11	4

TABLE XII.

Export of chillies and gum-copal for the past 10 years :—

Year.	Chillies.		Gum copal.	
	lbs.	Rs.	lbs.	Rs.
1914	101,183	24,735	98,035	84,080
1915	78,730	36,407	130,378	49,210
1916	125,887	66,086	52,784	35,766
1917	172,074	46,293	43,265	28,605
1918	229,566	71,568	26,696	15,923
1919	89,614	31,224	103,404	68,615
1920	82,187	27,813	274,376	191,564
1921	48,832	32,318	236,096	232,633
1922	79,072	46,322	369,152	364,355
1923	37,520	12,419	374,864	342,850

The above figures do not show production.

Most of the gum-copal is imported from the mainland for re-export.

TABLE XIII.
Meteorological observations, 1923 :—

Month.	Temperature.						Rainfall.									
	Zanzibar Town.			Pemba, Banani.			Zanzibar.			Pemba.						
	Means of.		Absolute.	Means of.		Absolute.	Town, Seleni.	Kidiche.	Koani kotoni.	Thwaka.	Bani.	W. el. Kigomahe.				
	Max.	Min.	Max.	Min.	Max.	Min.										
January	86.5	79.2	88.9	86.6	78.4	89.5	75.0	3.99	9.08	8.60	8.07	4.23	1.51	22.11	4.63	6.85
February	87.7	80.9	90.4	89.2	80.2	92.0	79.0	0.98	0.02	0.42	1.30	0.53	0.00	0.44	0.80	0.00
March	88.3	80.5	91.3	81.4	72.7	91.0	79.0	3.51	3.40	1.46	2.21	2.80	2.28	1.09	2.70	0.45
April	84.6	77.4	89.0	86.8	77.9	90.0	75.0	22.06	11.59	10.08	12.16	14.29	12.77	14.94	14.10	8.94
May	84.8	77.4	88.0	84.6	77.0	88.0	73.0	1.68	2.89	2.10	2.74	2.67	3.15	11.19	11.94	10.33
June	83.3	74.8	84.9	84.4	75.3	86.0	73.0	1.32	2.57	1.59	1.24	1.53	1.84	4.05	6.93	4.88
July	82.4	74.1	83.9	84.6	76.7	85.0	70.0	2.29	4.18	6.38	7.81	5.08	2.53	3.06	4.77	5.76
August	81.3	72.6	83.3	82.6	72.9	85.0	71.0	3.93	10.74	5.21	7.07	7.41	4.63	2.56	4.06	3.79
September	83.4	73.6	86.1	84.7	73.9	87.5	70.0	0.64	2.12	1.58	1.11	2.67	0.49	0.30	0.15	0.00
October	85.0	75.7	87.2	86.5	75.9	89.0	74.0	1.30	3.20	0.95	0.58	3.15	0.69	0.95	1.33	5.66
November	85.5	77.5	86.2	86.6	77.4	89.0	74.0	8.43	5.89	6.09	9.58	2.72	2.99	10.99	9.51	7.13
December	87.3	79.9	90.1	88.3	79.0	91.5	74.0	7.12	3.24	3.83	2.70	6.49	0.52	4.64	5.33	6.89
Total	85.0	77.0	91.3	85.5	76.4	92.0	70.0	57.25	58.92	48.29	56.57	54.17	33.40	76.32	66.25	60.18

TABLE XIV.

Average mean temperature, Zanzibar :—

Year.	Maximum.	Minimum.
1909	84.9	75.9
1910	84.4	76.4
1911	84.3	76.3
1912	85.2	76.6
1913	84.9	76.4
1914	86.2	77.5
1915	85.7	77.1
1916	85.1	76.4
1917	84.5	76.2
1918	84.3	75.9
1919	85.5	77.0
1920	84.1	76.6
1921	85.0	76.6
1922	84.7	76.5
1923	85.0	77.0
Average for 15 years 1909 to 1923		76.6

TABLE XV.

Comparison of actual revenue and expenditure on the Government plantations year by year :—

YEAR.	REVENUE.				EXPENDITURE.				
	Cloves. Rs.	Coconuts. Rs.	Sundry. Rs.	Total. Rs.	Personal emoluments. Rs.	Cultivation. Rs.	Clove harvest. Rs.	Sundry. Rs.	Total. Rs.
1910	35,636	33,009	36,289	1,04,934	10,932	41,839	6,081	8,736	67,588
1911	1,01,313	41,576	33,604	1,76,493	9,362	54,780	28,366	10,127	1,02,635
1912	1,63,042	60,443	30,988	2,54,473	14,684	62,238	29,160	15,809	1,21,891
1913	1,85,185	72,771	29,053	2,87,009	17,962	62,554	38,391	15,643	1,34,550
1914	67,000	78,745	29,818	1,75,563	32,159	59,603	36,309	12,577	1,40,648
1915	1,77,977	74,964	25,800	2,78,741	41,660	65,522	55,439	5,735	1,68,406
1916	1,66,391	74,770	21,039	2,62,200	44,220	70,485	63,146	6,878	1,84,729
1917	2,50,348	1,01,511	16,321	3,68,180	41,492	79,149	23,535	6,944	1,51,120
1918	2,13,030	1,19,606	18,263	3,50,899	51,643	90,587	63,404	12,414	2,18,048
1919	2,08,491	1,27,650	15,708	3,51,849	55,879	1,15,741	37,426	11,229	2,20,275
1920	95,524	1,57,085	9,900	2,62,509	51,727	1,24,638	35,522	15,080	2,26,967
1921	3,61,736	1,47,999	18,456	5,28,191	65,410	1,44,979	98,434	21,984	3,30,807
1922	70,731	1,17,499	39,211	2,27,441	69,096	1,54,429	81,531	21,822	3,26,878
1923	5,01,149	1,45,604	13,612	6,60,365	65,839	1,60,919	64,628	27,380	3,18,766

TABLE XVI.

Trees on Government Plantations, Zanzibar.

	1910	1922
CLOVES—		
Bearing	98,633	109,525
Young	37,021	22,436
COCONUTS—		
Bearing	70,193	153,522
Young	116,277	130,295

TABLE XVII.

Table showing rents on licensing coconuts from 1910 :—

Year.		Rent.
1910	... Rs.	21,941
1911	... „	41,195
1912	... „	52,443
1913	... „	68,248
1914	... „	93,120
1915	... „	75,606
1916	... „	71,404
1917	... „	93,335
1918	... „	1,26,776
1919	... „	1,26,169
1920	... „	1,49,936
1921	... „	1,63,450
1922	... „	1,42,289
1923	... „	1,45,604

NOTE.—Tenders are called for each year for the purchase of the coconuts. As a rule natives only tender who are financed by Indian copra dealers. Rents are paid quarterly in advance, and should the market be falling at quarter day the Indian refuses to advance the purchase money, and the native has no course but to default. Natives, in their anxiety to outbid others, do not carefully estimate the profits possible on the amount they offer, and in 1921 many of them lost over their venture. Hence the lower sum received in 1922. There were similar defaults in 1923 also.

TABLE XVIII.

Clove yields (Government plantations) showing green and dry cloves and percentage of loss between the two. Season 1922/23. :-

Shamba.	Green cloves.		Dry cloves.		Percentage of loss between the two.	Dry Stems. lbs.
	lbs. picked.	Amount spent.	lbs. delivered.	Amount realized.		
ZANZIBAR		Rs. Cts.		Rs. Cts.		
Marseilles	451,441	14,978 39	125,929	82,397 99	72	15,589
Basra	123,965	4,175 60	35,477	21,924 68	71	4,257
Kinaoni	51,265	1,881 27	16,210	10,422 82	68	2,612
Koani	168,421	5,761 80	25,282	15,801 74	84	5,225
Dunga	153,204	4,972 11	41,408	24,646 26	70	6,764
Kizimbanis	227,825	7,849 48	59,478	37,990 19	70	6,158
Mlangos	258,265	8,826 80	69,532	46,568 70	70	4,546
Kipange	72,974	2,531 40	17,606	12,269 02	75	2,148
Kinuni Moshi	40,564	1,350 81	10,352	6,467 20	74	2,074
Bumbvi Sudi	34,245	1,125 40	8,804	4,973 83	74	1,596
Selem	342,669	12,316 77	97,831	60,829 45	70	21,601
Mahonda	66,256	2,390 83	17,254	8,631 72	73	3,717
Mbaleni Kubwa	62,842	2,152 89	14,423	8,186 22	77	2,709
Mbaleni Ndogo	33,694	1,108 92	9,275	5,907 27	72	1,846
Kitope	74,707	2,637 67	20,191	13,061 96	72	3,116
Mkanyageni	90,197	3,398 35	26,126	15,855 91	71	5,038
Kidichi	43,480	1,441 74	14,914	8,839 67	65	2,956
Mgongongamia	83,323	2,212 64	22,086	14,640 02	73	5,219
Mtoni group	14,633	380 79	3,626	2,266 36	75	694
Mazizini group	6,305	151 60	1,814	1,191 87	71	512
Total	2,400,275	81,645 26	637,618	402,872 88	74	98,377
PEMBA						
Fufuni	242,523	7,037 34	76,253	43,559 95	68	18,173
Michenzani	13,140	359 12	4,227	2,184 94	67	1,065
Kwanacho	12,276	343 62	4,216	2,096 11	67	1,136
Mkoani	9,808	310 47	2,951	1,694 04	69	561
Tundaa	77,979	2,396 97	22,326	11,271 01	71	5,372
Kungeni	7,841	221 73	1,888	938 50	74	302
Wesha	4,164	111 37	1,322	683 20	68	210
Natangatwani	42,264	1,339 22	8,020	3,965 19	81	178
Makondeni	66,073	2,134 81	18,342	9,018 23	72	... A
Mpona	100,315	3,203 64	15,594	7,748 89	84	210
School	24,132	667 97	6,927	3,456 80	71	260
Fueni	4,051	124 89	898	423 14	77	123
Wakf	1,316	30 86	335	162 52	74	62
Makue	10,460	337 42	1,776	824 71	83	... B
Kizimbani	2,952	92 24	182	86 56	90	... C
Bomani	5,159	156 38	1,204	623 98	76	120
Total	623,953	18,868 05	166,261	88,737 77	74	27,772

A. Spoilt by rains and sold on the shamba for Rs. 77.00

B. Included in Mpona lot.

C. Spoilt by rains and thrown away.

TABLE XIX.

Seasonal clove crops from Government plantations :—

Season.	Zanzibar *fraslas.	Pemba fraslas.	Total fraslas.	Percentage to whole crop of the Protectorate.
1910/11	1,818	337	2,155	1.12
1911/12	16,475	4,986	21,461	2.80
1912/13	1,526	153	1,679	1.24
1913/14	10,394	4,624	15,018	2.06
1914/15	14,911	1,973	16,884	3.21
1915/16	11,300	4,192	15,492	1.94
1916/17	18,782	2,175	20,957	4.09
1917/18	3,805	684	4,489	1.51
1918/19	20,314	4,575	24,889	3.02
1919/20	1,770	280	2,050	0.78
1920/21	18,785	2,451	21,236	4.28
1921/22	783	1,569	2,352	0.88
1922/23	18,218	4,750	22,968	2.34

Crops from previous seasons to 1910 are given in former reports.

*One frasla equals 35 lbs.



